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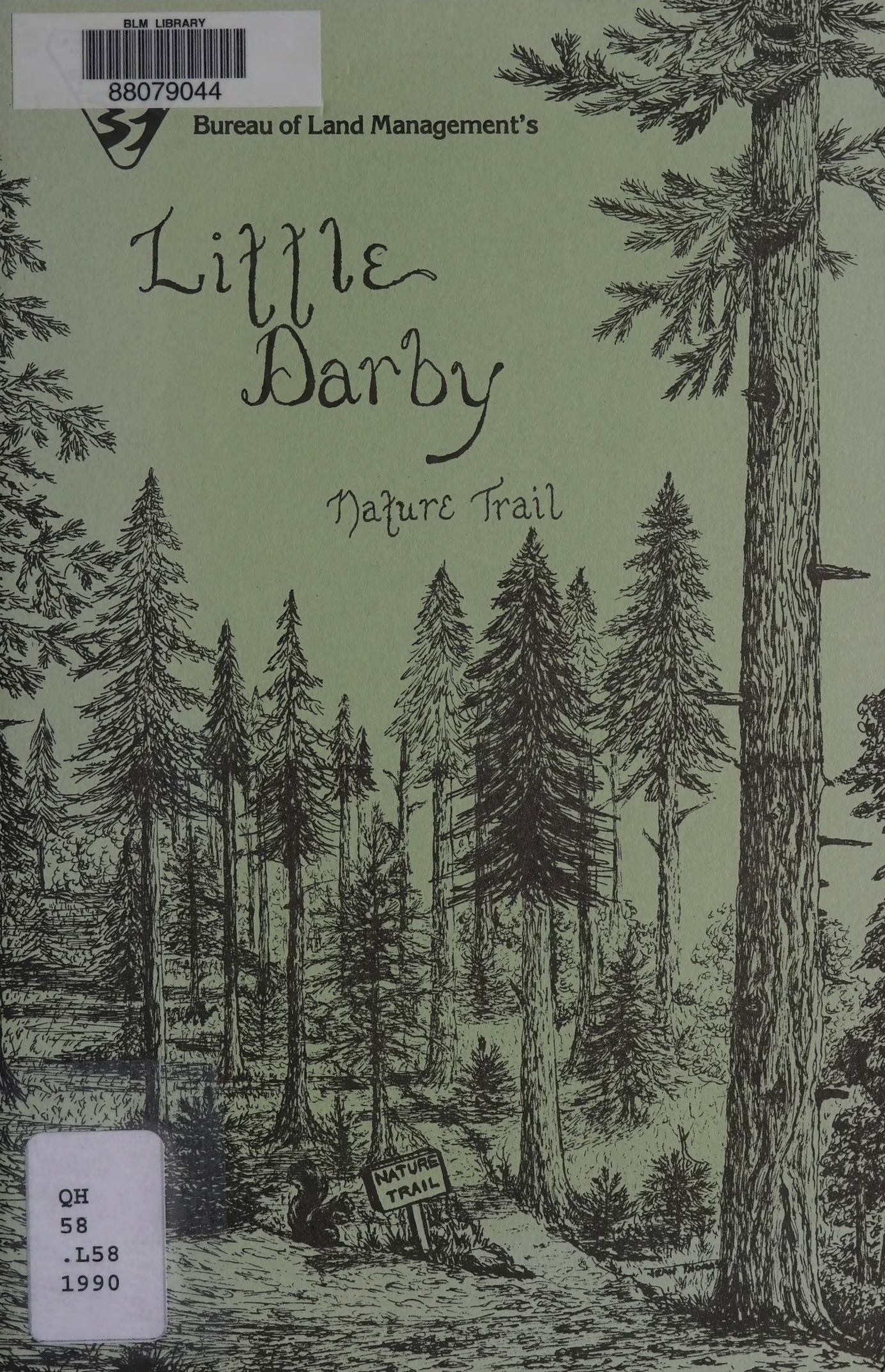
Bureau of Land Management's

Little Darby

Nature Trail



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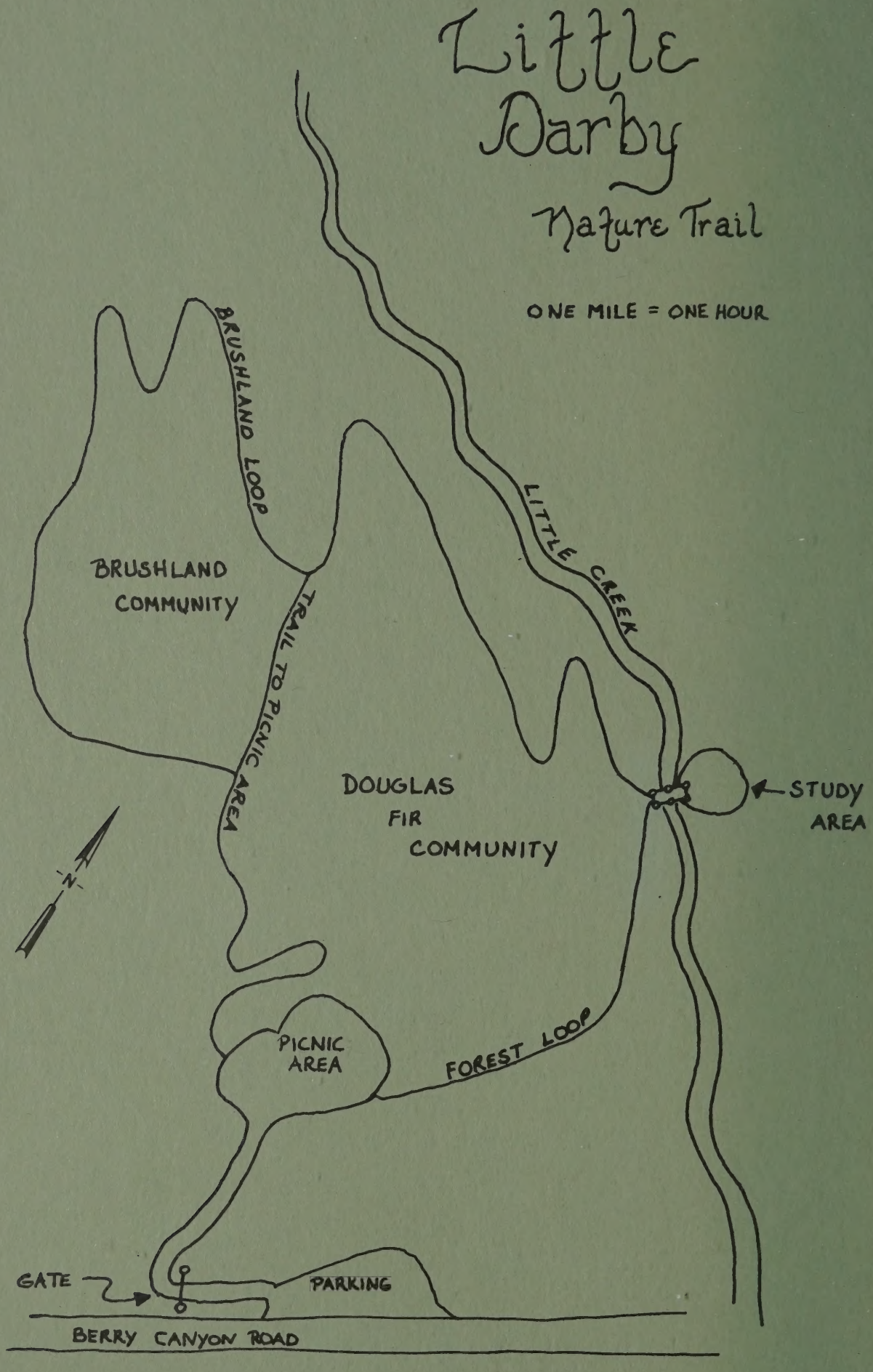

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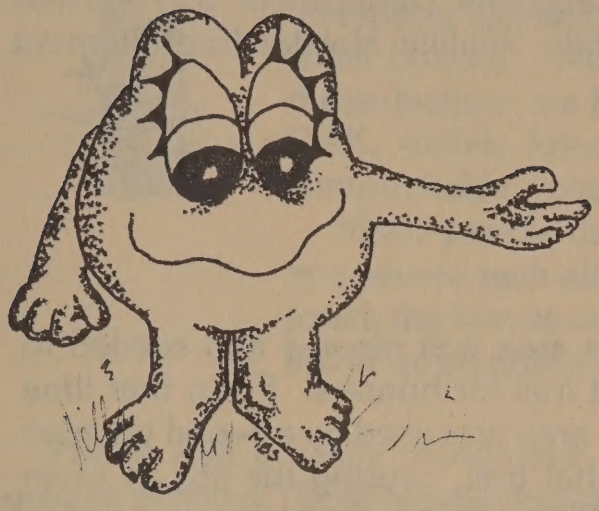
ABOUT THE NATURE TRAIL



HELLO and WELCOME to Little Darby Nature Trail. I am Douglas the Frog here to help guide you through my home, the forest wonderland.

There are two loops of this trail as you can see by the map on the opposite page. The longer loop leads you on a one-mile journey through the moist forest and up to a dryer brushland called chaparral. The smaller loop is a half-mile walk through the forest only. Both loops will bring us right back to the picnic area.

The longer loop takes about an hour and the smaller, a half-hour, depending on how many stops we take to look and listen.

Although there is a bit of a climb in some places, the trail can be traveled by young and old. You might watch your step on some sections of the trail as there is loose rock and when the trail is damp it becomes slippery.

Since Little Darby Nature Trail winds through the homes of many animals, we must be very careful not to litter or remove anything from the forest. Each plant, rock, insect and animal depends on one another for life and has its place in Nature's plan to keep the forest healthy and strong.

Along Little Darby Nature Trail you can learn to read the landscape which helps determine plant and animal life in this area and to understand how these living things and man interact with one another. To point out some of the unique features along the trail, markers have been posted and numbered according to those in your booklet.

Certain pages of this booklet are set aside for you to record what we observe as we walk along the trail. You might want to bring along a pencil.

LITTLE DARBY

In 1965, the Bureau of Land Management in cooperation with Mendocino County and the California Department of Fish and Game began the Darby Mountain Wildlife Habitat Improvement Project.

In 1967, the ridge around this area was plowed and seeded to provide food for deer and a foot trail for hunters. From that time until 1975, the Little Darby Peak area was used by off-road vehicles which destroyed the plants on that trail, causing the soil to wash away. The area was closed in 1975 to off-road vehicle use.

The Little Darby Nature Trail was constructed in 1978 by the Youth Conservation Corps of Ukiah who continued their work to improve the trail in 1979.

FRIEND OR FOE?

If you look around the forest you will see many small bushes. Most of these bushes are POISON OAK, widely known as an "untouchable" plant.

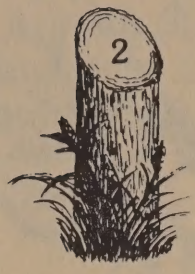
Many people break out in a severe rash after they touch the leaves or stem or brush up against it with their clothes.

Poison oak is easily recognized by its glossy leaves growing in groups of three. These leaves change in color from reddish in spring to green in summer to red in fall. After the leaves fall in autumn, the thick light grey stems form a thicket, which is a tangle of bushes. These thickets provide secure homes for animals like rabbits and quail. Deer enjoy nibbling on the poison oak leaves.

Native Americans of California, who are believed not to be affected by poison oak, made a black dye from the juice for their baskets. Birds eagerly eat the white berries of the poison oak. The undigested seeds are dropped, along with the birds' wastes, a fertilizer, and other plants begin to grow in new areas.

Poison oak can live in almost any climate in both shrub and vine forms. Its roots help keep the soil from falling away by holding the soil together.

WHAT IS A PLANT COMMUNITY?



Think of the word 'community'. What does this word mean to you? Could you say the town you come from is a community? What goes on inside a community? A community is a place where people work, play, and depend upon each other for their livelihood.

Plants and animals also live and work together to form different kinds of communities. Soil, water, temperature, and altitude are among the conditions that cause certain plants and animals to depend upon each other in a particular area.

Some people in your community might travel to other places to work. Let's compare this with the life of a bobcat. The bobcat may make his home in the forest, using the stream for his water supply - but he may go up to the dryer chaparral to hunt for jackrabbit or quail. Some animals can live in a number of communities, while others stay in only one. Why is this?

The forest you see around you is a Douglas-fir community, so named because Douglas-fir trees have a lot of influence on this community. Why are these big trees so important? What effect do they have on the other plants?

ANSWERS:

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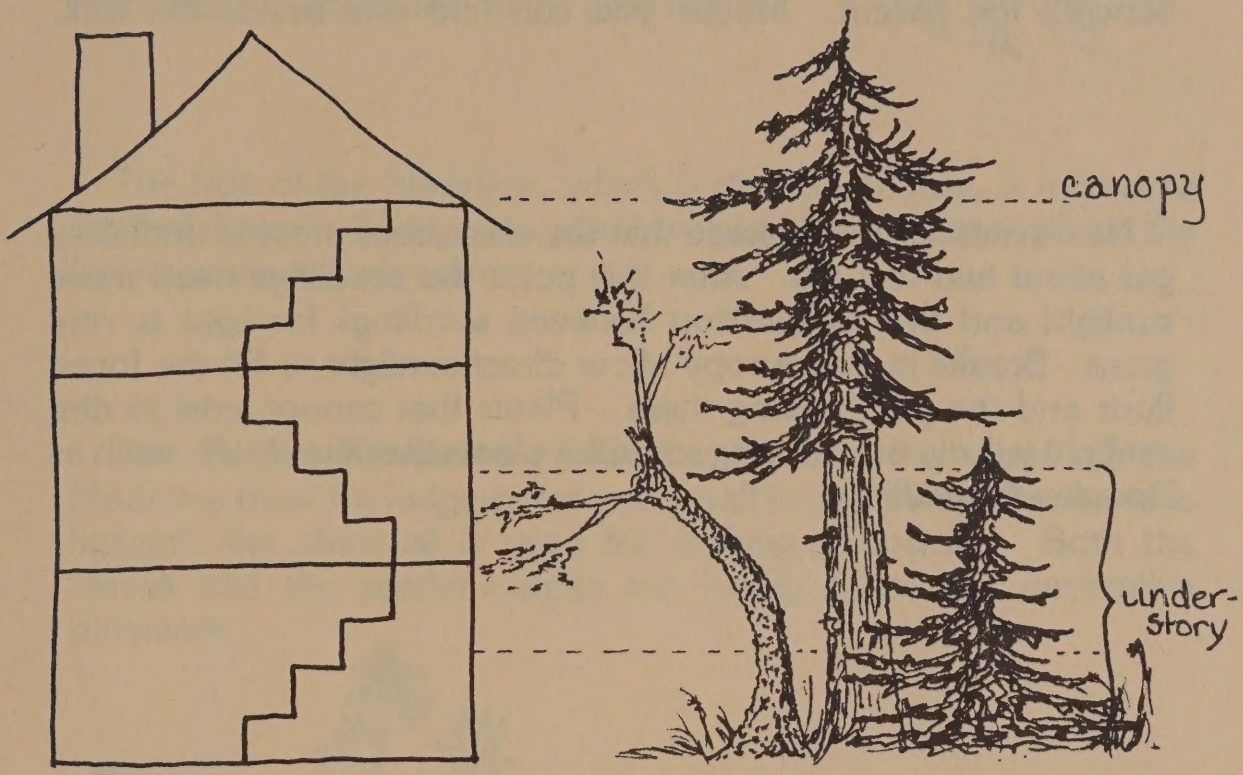
The amount of sunlight a forest receives is controlled by the canopy,the uppermost layer of spreading branches. Beneath the canopy, other types of trees at different heights form lower layers. This idea can be compared to the different levels of a three or four story house.



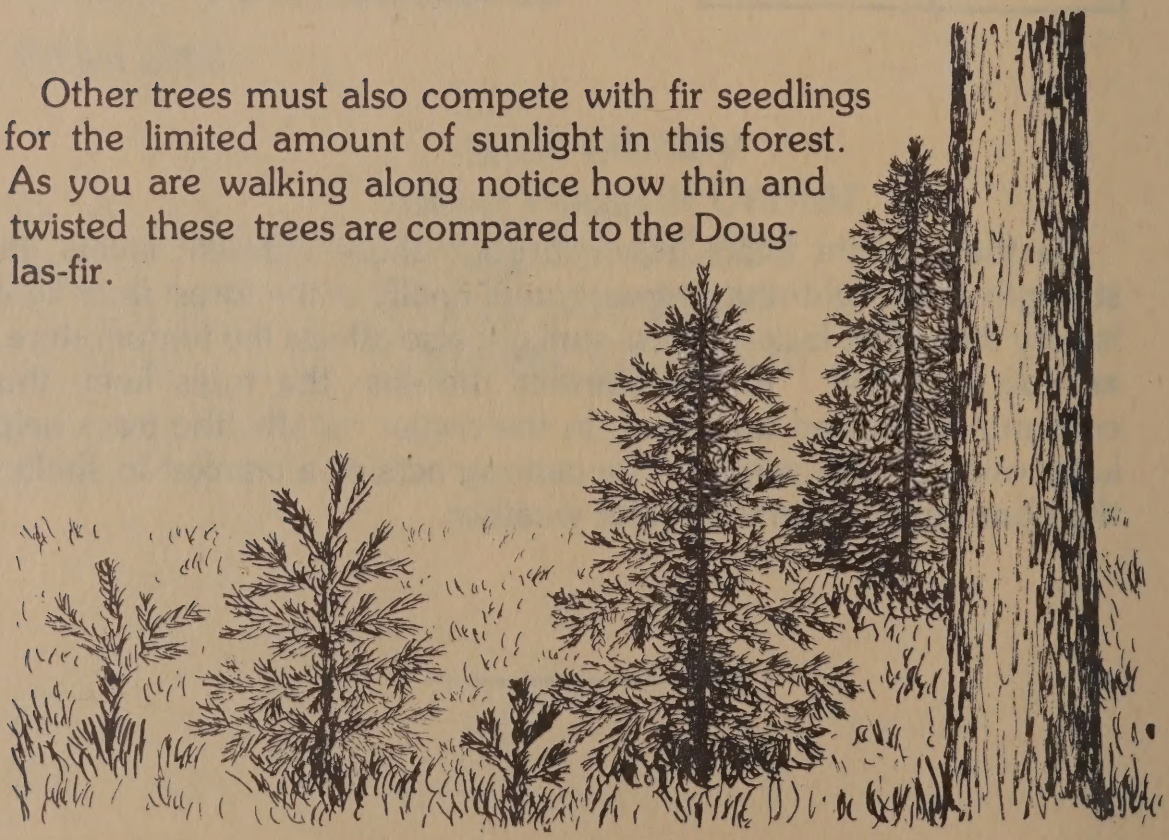
As the sunlight filters down through these different layers, its strength and brightness decrease until finally at the forest floor light is very dim. The lack of direct sunlight also affects the temperature, as you can feel. In the warmer months, the trees keep this community shaded and cool. In the cooler months the trees help keep out the cold wind. The canopy acts as a blanket to shelter this community from the colder weather.

As you look around you'll notice that along with the larger Douglas-fir there are some other kinds of trees living in this community. Among these are seedlings of the Douglas-fir.

While the cones are still on the trees, the seeds are released from the cone. The "wings" help the seed to ride the wind so it doesn't fall right beneath the parent. Maybe you can find one beside the trail.

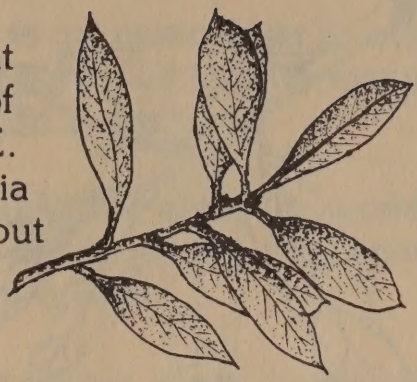
New seedlings need shade that the older trees provide until they get about two feet tall. After this point the seedlings need more sunlight and the competition between seedlings for light is very great. Breaks in the canopy allow direct sunlight to hit the forest floor and the plants living there. Plants that cannot exist in dim sunlight will die out, leaving room for plants that like shade, such as Douglas-fir seedlings.

Other trees must also compete with fir seedlings for the limited amount of sunlight in this forest. As you are walking along notice how thin and twisted these trees are compared to the Douglas-fir.



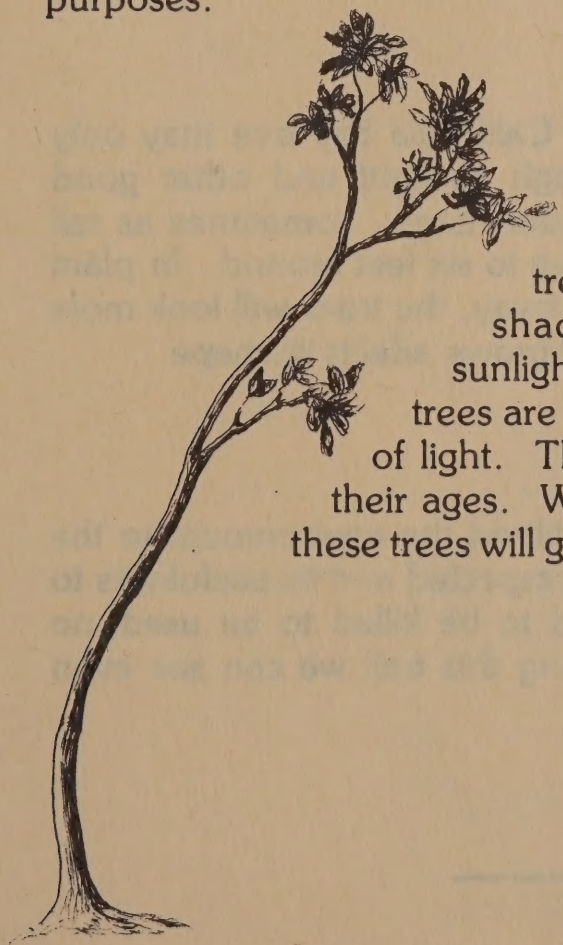
THE RED-BARKED TREE

The tree with the bright red-orange bark in front of you is called MADRONE. These native California trees are scattered about in the forest. Like the Douglas-fir, the Madrone has green leaves all year round.



The fruit of the Madrone, which is ripe in January, is a favorite food of doves, wild pigeons, and barn yard birds. Cows will eat the leaves when grass is scarce.

The Native Americans of California used the wood of the Madrone trees for lodge-poles and small tools. When the wood is burned, the charcoal is used for making gunpower. Both the leaves and the scarlet berries are highly prized for decorative purposes.



Douglas-fir seedlings grow much faster than oak and madrone trees. Firs growing near these trees shade them from their source of sunlight. In this forest, oak and madrone trees are forced to seek out a stronger source of light. Their shapes become spindly despite their ages. When adequate sunlight is available, these trees will grow quite tall and strong.

A NOSE-TINGLING SMELL

The CALIFORNIA BAY-LAUREL tree, approximately twelve feet to the left of the Madrone tree, can be recognized by its slender dark green leaves. This tree was used for many things by the Native Americans of California. Head and stomach aches were cured by rubbing the leaves on these parts. The leaves were also put in the nose to "unstuff" it. They were rubbed on the skin to repel mosquitoes or scattered in the home to chase away flies. A man preparing for a hunt would jump through the smoke of burning green leaves to cover his human scent.

Pick up a dead bay leaf from the ground, break and smell it. Its scent is similar to the spice, Bay, imported from the mediterranean area, which has a climate much like parts of California.

Growing among Douglas-fir, the California bay tree may only grow as a small tree. With enough sunlight and other good conditions a bay tree can become quite large; sometimes as tall as 60 feet, and the trunk may be five to six feet around. In plant communities where water is farther away, the trees will look more like bushes. The place where a plant grows affects its shape.

Native Americans of California utilized the environment to the fullest. Each plant and animal was respected and its usefulness to man recognized. If a creature had to be killed to be used, no part was wasted. As we travel along this trail we can see even more examples of useful plants.

LISTEN TO THE FOREST'S SONG

Let's take a little while to get even closer to our forest. Within this comfortable rest stop lie many interesting mysteries for you to discover.

Find a nice place to just sit and enjoy the world around you. Dangle your feet over the bridge, find a neat spot under a nearby tree, or sit on the benches provided.

Now, trying to be as still and quiet as possible, close your eyes and listen. Listen to all the sounds of the forest; you might hear the steady babbling of the stream, the rustle of leaves in the wind, the hum of a nearby insect, or the distant call of a bird. Are there any other sounds you can hear? What is the faintest sound? What is the loudest sound?

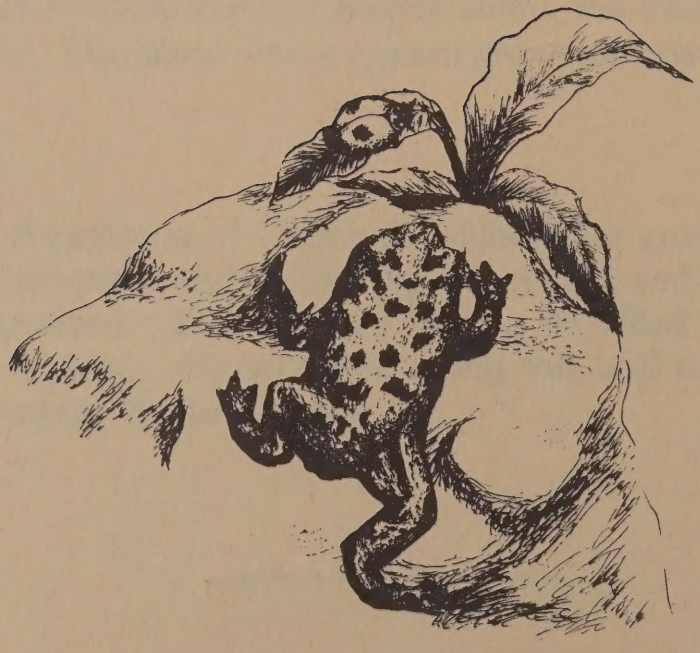
ANSWERS:

SOUNDS	WHAT MADE THEM?

COLORS TELL STORIES

Let all your senses discover what the forest has to offer. Colors, smells, sounds, and textures can be an exciting part of our environment if we remember to use them. Name some facts colors can tell you about your environment. What can colors tell you about the seasons? What colors are present in the natural objects around you?

ANSWERS:

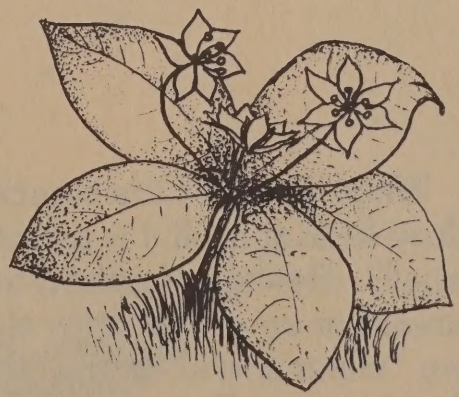


The colors live
Between black and white
In a land that we
Know best by sight.

But knowing best
Isn't everything
For colors dance
And colors sing,
And colors laugh
And colors cry—
Turn off the light
And colors die,

And they make you feel
Every feeling there is
From the grumpiest grump
To the fizziest fizz.

And you and you and I
Know well
Each has a taste
Each has a smell
And each has a wonderful
Story to tell.



Mary O'Neill

SCENTS FROM THE FOREST

Your sense of smell can tell you many things about your environment. Breathe deeply and take notice of everything your nose senses. List the different smells you can pick out. Where do they come from?

SMELLS	FROM WHERE?

When you find the source of the odor you have smelled, take a close look at it. If it is a plant, are the leaves thick or thin, large or small? (Beware of poison oak, though!!) Does the plant live by the stream or up on the dryer slope? The trees that grow by the stream are "water spend thrifts," losing water quickly through their large, thin leaves. Trees which grow on sunny hillsides usually have smaller, thicker leaves designed to conserve water. By noticing different types of leaves, how can you tell when you are near water?

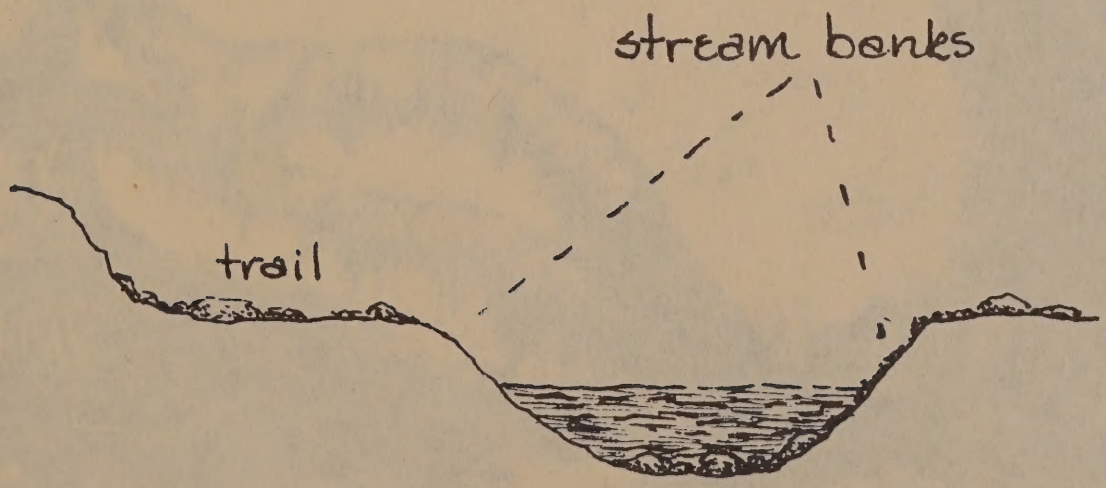
A STREAMSIDE COMMUNITY

Another community we have in this area is the streamside community. This includes all those living things that need larger amounts of water in order to survive.

The stream is a vital part of the forest. Think of the land as your body and the stream as your blood. The water supplies the nutrients to all parts of the land, just as our blood supplies our arms and legs with life-giving nutrients.

Notice how Little Creek has worn the soil away from stream banks. Perhaps a hundred years ago, you would have been standing right in the middle of the stream water. As the flowing water gradually washed away soil and pieces of rock, the stream sank, leaving these "banks" on each side.

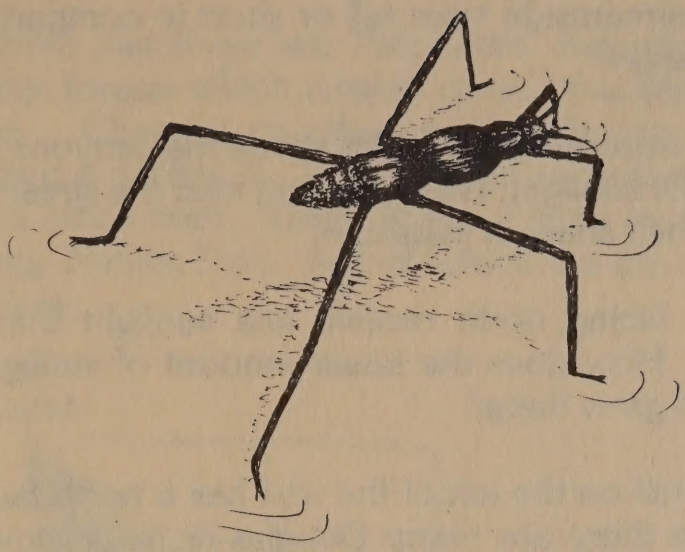
Since soil is much lighter than the rock particles, it can be carried many miles further down stream. Little Creek's course runs into Tomki Creek which empties into the valleys below. The soil which the stream has washed away along its course is also deposited in these valleys, gradually adding more rich soil to the valley floors.



Find a spot near the stream bank, bend down, and examine the soil at your feet. Touch it. Feel it. Smell it. What signs of plant and animals can you find within the first inch of soil?

ANSWERS:

WALKING ON WATER



In the spring and summer months the stream is alive with insect and animal life. Insects hatch from their eggs, grow to adulthood, and die all within this short amount of time. Water striders are quite interesting little creatures. Their feet and legs are so suited to their water environment that they can actually walk on water. The tips of the two rear pairs of legs are fringed with water resistant hairs. Striders spend most of their lives in streams and ponds eating various smaller insects.

Suppose you were a water strider, what part of the stream would you like best, the still waters or the fast moving currents?

ANSWERS:

HILLS AND CANYONS

Are streamside trees tall or short in comparison to the trees up the hillsides?

The surrounding hillsides shade the canyons so that they receive very little sunlight. Trees growing near the stream must reach higher to get their share of sunshine.

Hills facing north receive less sunlight than those facing the south. How does the lesser amount of sunlight affect the plants that will grow there?

The hill on the left of the trail has a north facing slope. As you can see there are many Douglas-fir trees growing there and the slope is almost always shaded by the hill on the opposite side.

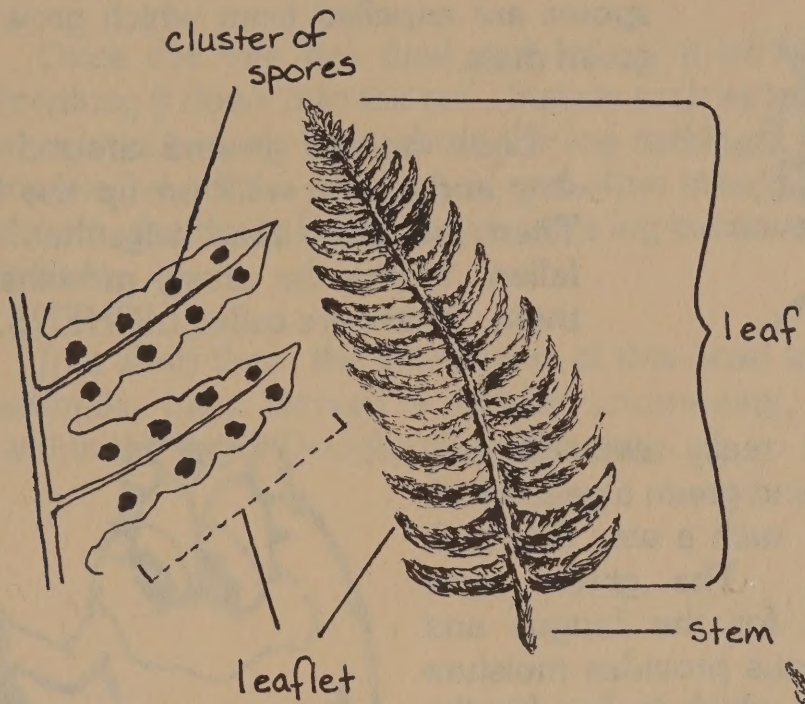
South facing slopes are more exposed to the sunlight. The intense light makes for a dryer climate where only plants and animals that have become used to this can exist. How does the heat and dryness of this slope affect the soil?

There are many things like the amount of sunlight, which can determine the kinds of plants and animals that live in a certain environment. Can you name any others?

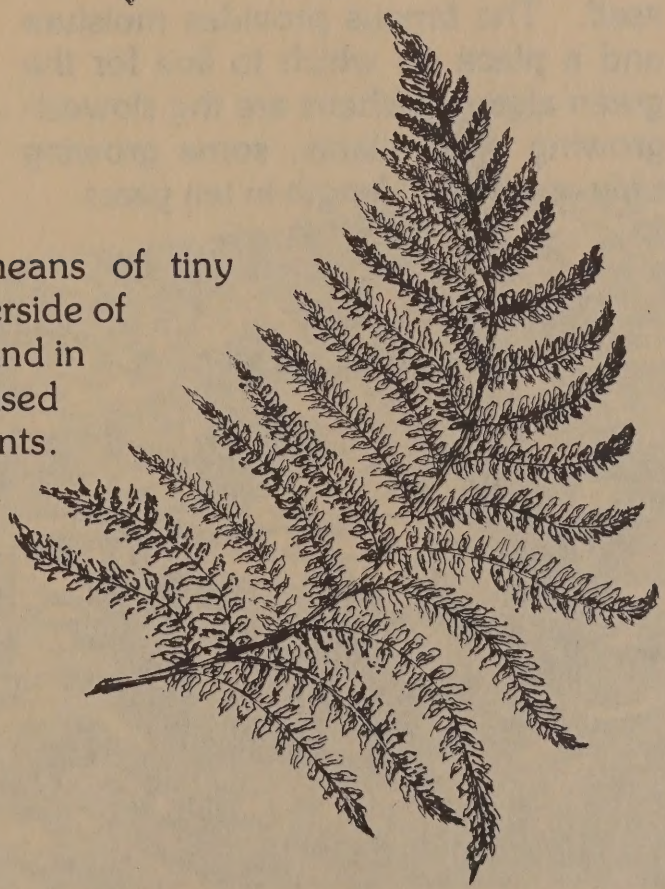
ANSWERS:

ANCIENT PLANTS

FERNS like these are "left-overs" from the hot, damp forests which existed during the Dinosaur Age. Changes in the earth's climates have caused a decline in the number of varieties of ferns since then. Three types of ferns are found along the Little Darby Nature Trail, two of which are the Sword Fern and the Lady Fern.



Ferns reproduce by means of tiny spores located on the underside of the leaflets. If the spores land in a suitable place when released they will grow into new plants. Carefully examine the undersides of the ferns closest to the trail; can you find any spores?



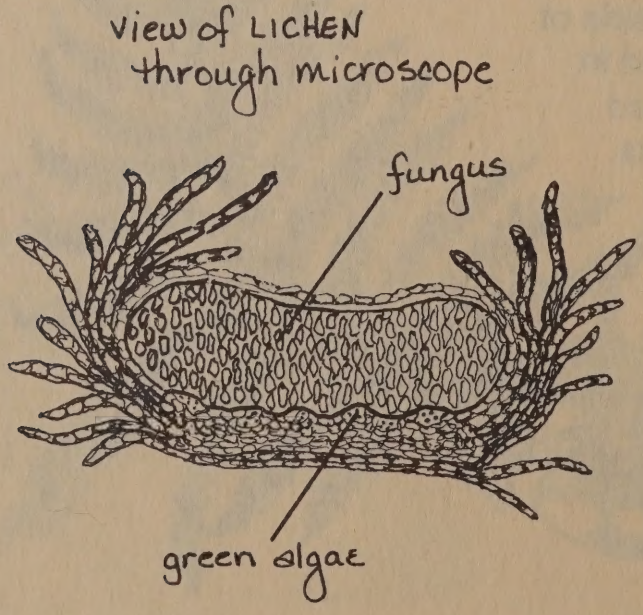
A CLOSE RELATIONSHIP

A few feet to the right of those ferns are boulders with a thick, green mat covering them, these are MOSSES.

Mosses reproduce by spores. At certain times of the year, very thin, hard stems will grow up from the mat. From tiny capsules at the ends of these stems, dust-sized spores are expelled from which grow the green mats.

Look on the ground around this stop and as you walk on up the trail. There are many dead twigs that have fallen. Notice the crusty growths on them. These are called LICHENS.

Lichens are really two different plants, fungus and green algae, which live together in such a way that both plants benefit. The green algae produces food for the fungus and itself. The fungus provides moisture and a place on which to live for the green algae. Lichens are the slowest-growing of all plants, some growing only one inch in length in ten years.



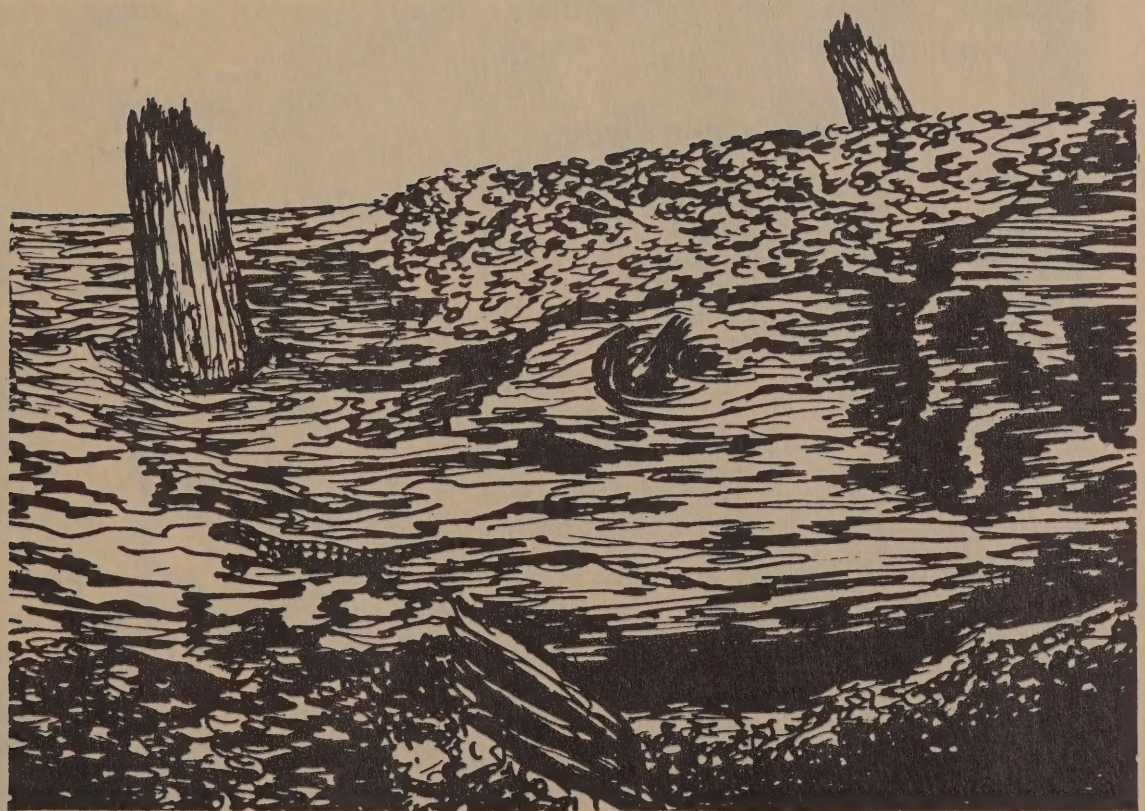
Lichens are called "pioneer" plants because they are often the first living things to grow on a bare surface, such as a rock. They create an acid which starts breaking the rocks into soil, this makes the surface more favorable for mosses and larger plants.

DEAD LOG PROVIDES SHELTER

Though this tree is dead, it is still a very important member in the forest community. it serves as a home for many plants and insects. Lichens and mosses have probably lived on this tree even while it was alive. These plants, as we have learned, help break down rocks into soil. What effect would they have on trees? Is a lichen and moss-covered tree healthy?

Once the tree has died and fallen, a lot of effort is put into breaking it down into the soil. Insects such as termites, beetles, and ants bore tunnels throughout the log making it their home. These insects live off the dead wood and other insects. You may find my cousin, the toad, living close by this log because there are so many insects.

In a short time, the inhabitants of this dead log, both plants and animals, have formed a smaller community, or neighborhood, within the larger Douglas-fir community.



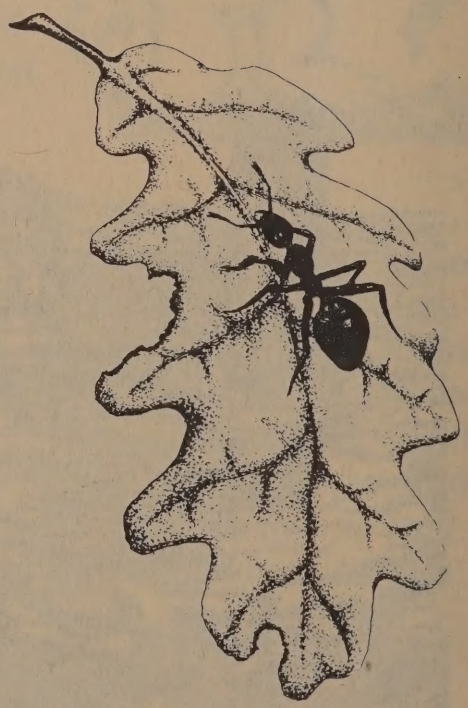
Being careful not to pull the log apart, let's examine it more closely. How many different kinds of plants can you find living on it? How many insects? Where is each found on the log (outside, inside, or on the ground)? Does the log have an odor?

ANSWERS:

PLANT OR INSECT	WHERE FOUND

CAN YOU FIND THEM?

Many plant and animal activities go unnoticed as we walk the trail. Do you know why?



While you are walking farther on the trail, pick a small area at the trail's edge and see how many insects and plants you can find. If you carefully look under some leaves you might see there is still another community existing. Ants, worms, and beetles seek shelter under these fallen leaves and dig tunnels througout the forest floor. Their food may be leaves, roots, and the dead insects they find. Slowly but surely through time, with the help of animals, rain, sunlight, and temperature, all helping to break the leaves into smaller and smaller pieces until they become part of the soil itself.

NUMBERED TREES

Douglas-fir trees are one of the most valuable in Mendocino County as far as using the wood for lumber. Foresters have marked numbers on these trees so they can practice estimating how much timber each tree can produce. It is very possible that one of these trees could supply enough wood to build a house.

As we have mentioned before, Douglas-fir provides a great amount of shade to the forest floor. Left untouched, the older fir trees would gradually shade the land so much that none of its seedlings could grow toward the sunlight. Trees that are more suited for shade would soon grow up and lessen the seedling's chances even more. In time, the only trees growing under the older firs would be those which are more shade-tolerant. To prevent this from happening, foresters usually cut down some of the older fir trees to allow more sunlight into the forest, but not so much light that the soil dries out. This way the seedlings are allowed to grow up to produce even more seedlings.

The tree with the number 18 on it has many types of lichen and moss living on its bark. Can you find any that you have not seen before?

WILDLIFE TREE

The trunk of this tree was hollowed out by a fire long ago. Animals, like squirrels and mice, take advantage of small places like this for their resting and eating stops. Many times you can find the nut shells or seeds from fruit eaten by these animals on the ground in and around hollows like this.

Pretend you are a squirrel. Why would you like these hollows? What other animals would use them?

ANSWERS:

UPHILL TO DRIER GROUND

Just as the creatures of the forest need to rest occasionally, let's take advantage of this nice spot to sit and look around us.

Do you see any plants living here that you have not seen before? A few feet farther up the trail on the uphill side, clumps of grasses begin to appear. Why is this? As we travel uphill from the moist streamside the soil becomes dryer and you begin to see different plants. Do you notice the Douglas-fir trees are not as dense here as they are down by the stream?

Take a few minutes to feel the soil. How is its texture different from the soil you felt at the stream? Does it smell any different?

ANSWERS:

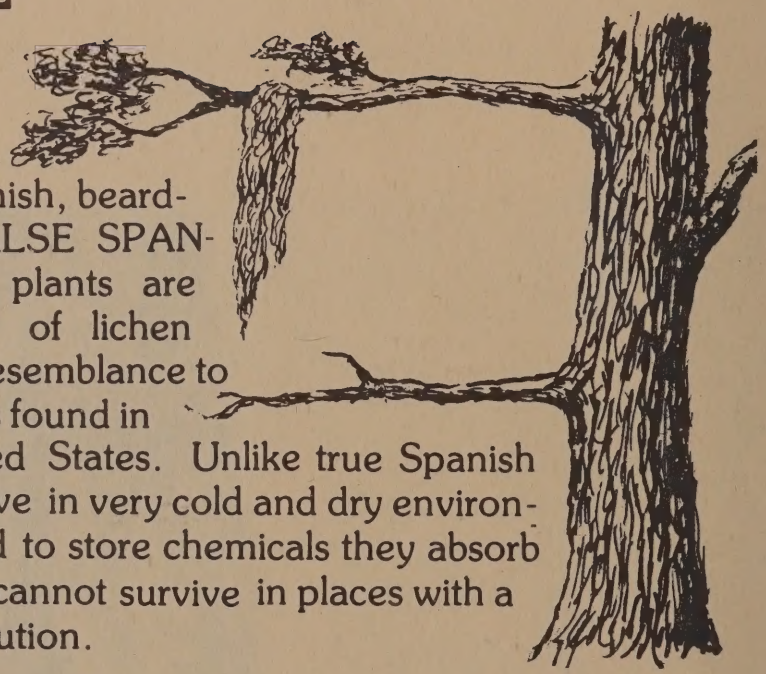
WINDFALL

Strong winds and hard rains are two elements that cause many trees to fall. Rains soak the ground and loosen the soil. Strong winds cause trees to sway and the combination can result in a windfall, a fallen tree.

The death of this tree can also be the life for another as it causes a break in the canopy. Young seedlings can then rise to adulthood in the newly gained sunlight.

Here the root system of the Douglas-fir can be examined more closely.

BEARDED TREE

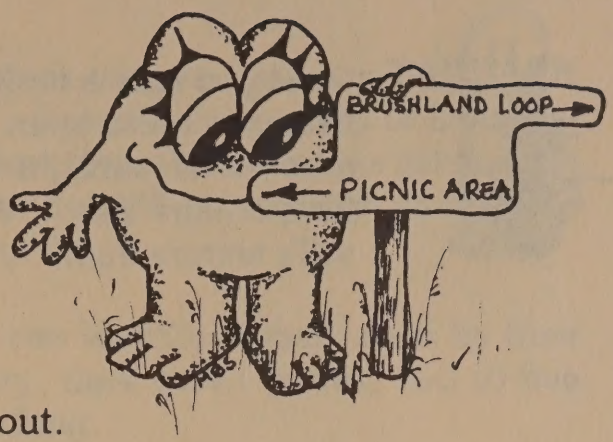


Hanging in the small oak tree to the left of the windfall is a greenish, beard-like growth called FALSE SPANISH MOSS. These plants are actually another type of lichen which is named for its resemblance to the Spanish Moss that is found in the southeastern United States. Unlike true Spanish Moss, lichens can survive in very cold and dry environments. Since they tend to store chemicals they absorb from the air, lichens cannot survive in places with a great amount of air pollution.

Dyes ranging from green to gold can be produced from several kinds of lichen depending on how they are prepared.

AT THE CROSSROADS

For those of you who wish to return to the picnic area without seeing the southern slope brushland, the trail straight ahead will take you back. Though there are no trail stops along the way, see if you can find other examples of the things we have talked about.



If you wish to take the longer loop just follow the bend of the trail to your right. Many other exciting things still lie ahead for us to learn.

TEMPERATURE CHANGE

As you take a look around notice how the area becomes more open and sunny. With the added amount of sunlight coming into the forest, the temperature rises. What could we say about the soil's texture then?

A FERTILIZER?

Here we find another type of fern called the BRACKEN FERN. This fern is very useful as a fertilizer for potatoes, in preparing a type of leather, and in certain medicines long ago.

These ferns, like the others, reproduce by spores. How is this fern different from the others?

CONKY FIRS

Some Douglas-fir trees in this area have brown growths attached to their bark. These are called conks, a type of fungus. Conks found here are about the size of a man's fist and shaped like a hoof on older trees and shell-shaped on younger trees. Conks are only the visible part of the fungus. The rest of the fungus is a network of fine threads which grows in the wood of the tree.

A USEFUL TREE

Most of the trees we see here are TANBARK OAK or tanoak. Because the canopy of Douglas-fir is less dense here, these tanbark oaks get enough sunlight to grow, but still not enough to grow to their full capacity.

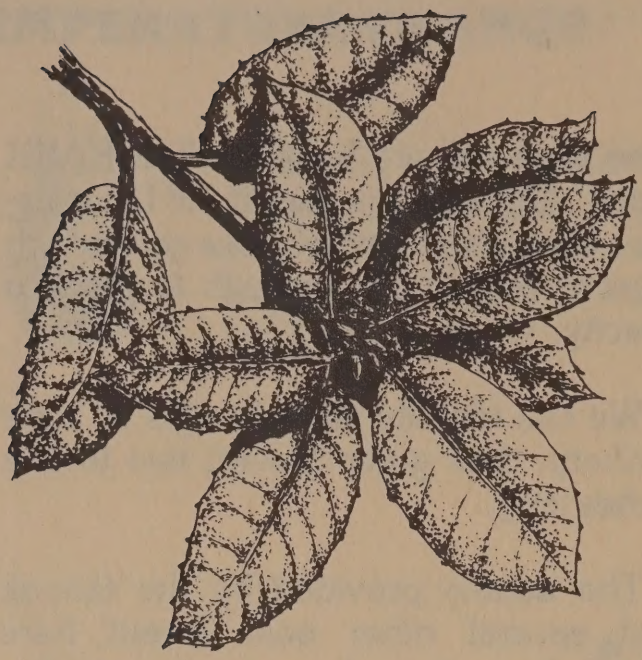
ANSWERS:

We can identify tanbark oaks by their leathery, dark green leaves, two to five inches long.

The acorns provided by the tanoak and several other oaks found here attract deer, squirrels, and various birds.

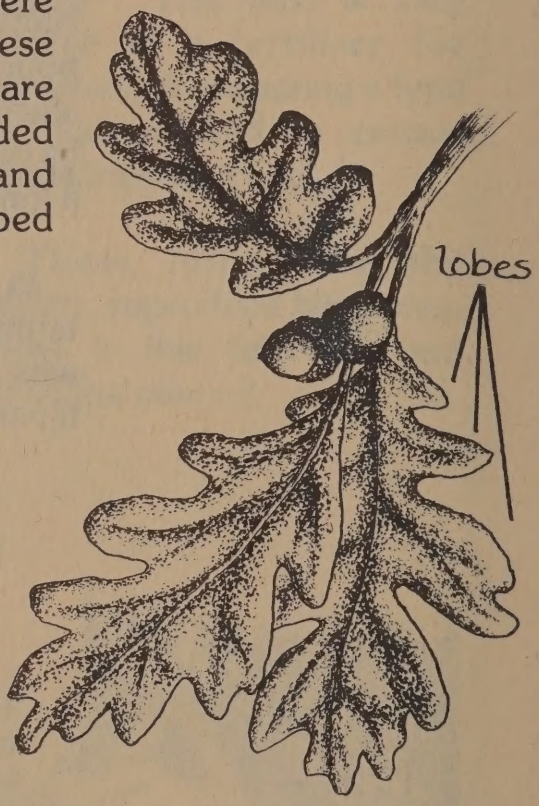
Acorns have also been used as a major food source by prehistoric Europeans and Native Americans of California. When pounded into a flour and their tannic acid leached out with cold water, acorns can be cooked into a sweet soup or baked into a kind of bread.

In the past, man used the bark for tanning leather, and because the tree was once considered to be a member of the true oaks, it was named Tanbark Oak.



LIVE OAKS are present in this community, too. Its leaves are 1-4 inches long, some having smooth edges, some spiney. These leaves are very well suited for dry weather and droughts. When water is scarce the edges of the leaves will curl in, something like an umbrella. This reduces the amount of the leaf the sun can shine on and conserves the trees' water supply. The acorn is oval-shaped which have caps covered with a golden-yellow "wool."

WHITE OAKS are also growing here in Little Darby. We can recognize these trees by examining the leaves which are 2-4 inches long with 7-10 rounded lobes. These leaves drop in the fall and winter. The acorns are thin and shaped like a cone.



Acorns are not the only means of reproducing for the oaks. Many times you will notice young branches coming out of the ground right near the trunk. These are SPROUTS which grow up from the roots. Sprouts depend on the roots of the parent tree for nourishment and shelter. Should the parent tree die, the sprouts can then take over on their own.

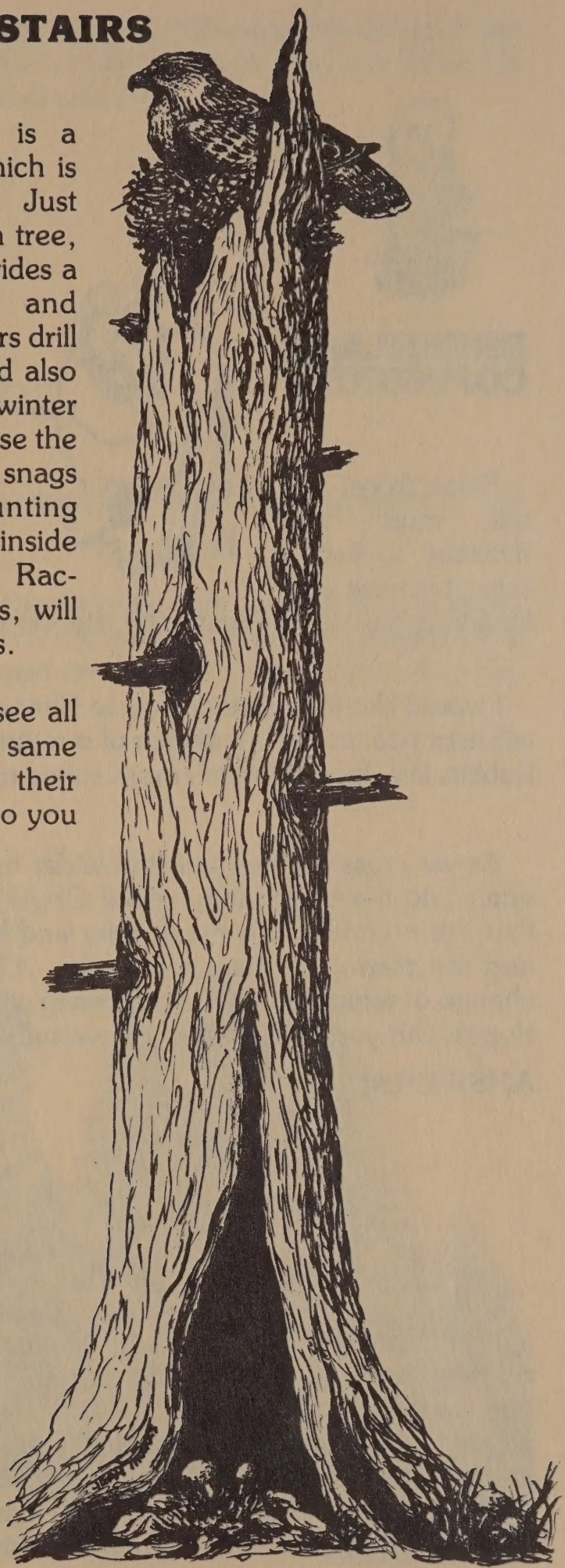
Sprouts are even more important when fire wipes out adult trees. Sprouts can develop from the roots of the burned trees using the nutrients left in the ashes.

UPSTAIRS, DOWNSTAIRS

A SNAG is a dead tree which is still standing. Just like the fallen tree, the snag provides a shelter for many plants and animals. Acorn woodpeckers drill into the bark for insects and also store nuts for emergency winter use. Owls and hawks will use the higher branches of larger snags for their nests and hunting perches. Squirrels like the inside of snags for their nests. Raccoons, being larger animals, will nest in the lower trunk areas.

Of course, you will not see all these animals living in the same snag. Most animals hide their nests from other animals; do you know why?

ANSWERS:



BRUSHLAND COMMUNITY

Since frogs, like me, must have moisture to live, I cannot survive very long in a brushland community like the one you are about to see.

I would like to introduce you to Chaparral-Jack-the-Rabbit, who will take you on the last stretch of our journey through Little Darby. Rabbits like Jack are much more suited to this kind of area.

As we cross the fire-trail (the wider trail built to control fire) we enter into the community called CHAPARRAL. You will notice that this community is much drier and hotter in the summer time and the plants are the brush types. Did you notice the sudden change of temperature? Remembering what we have said about the slopes, can you explain why it is warmer on this side of the hill?

ANSWERS:

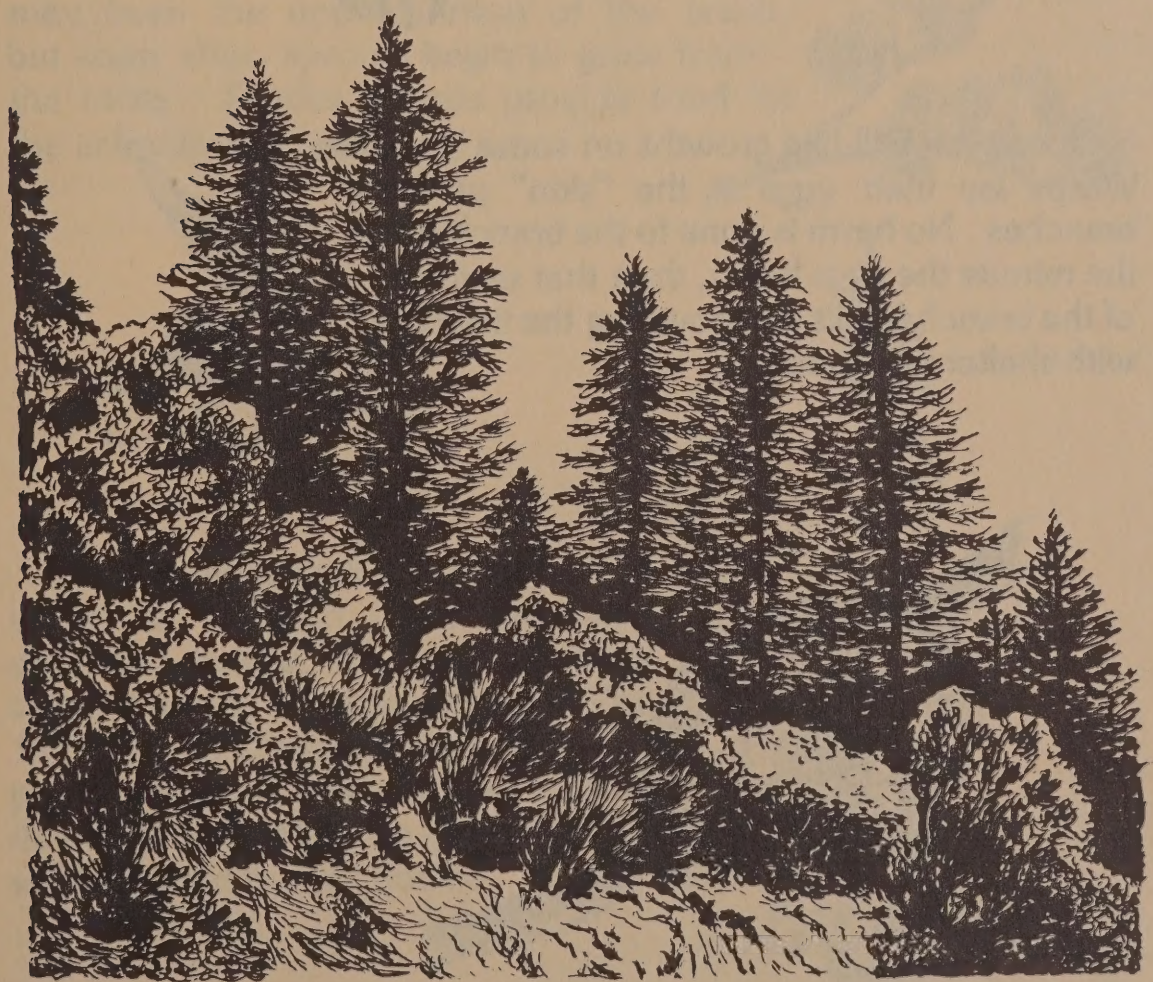
Look again at the fire trail. Do you notice the deep gullies running along both sides of the trail? Because this trail has no plants growing on it, the soil is not held in place by the roots of the plants. When heavy rains come, the water begins to flow down this trail like a small river, forming deep gullies as the soil is washed away. Can we apply what we have learned about streams here? Without plants, soil cannot remain on this hill.

Feel the soil of this dryer community. How is it different from the other two soil samples? Does it smell different? Do you think this soil could be washed away more easily?

ANSWERS:

Taking a deep breath, notice the totally different smell of the chaparral.

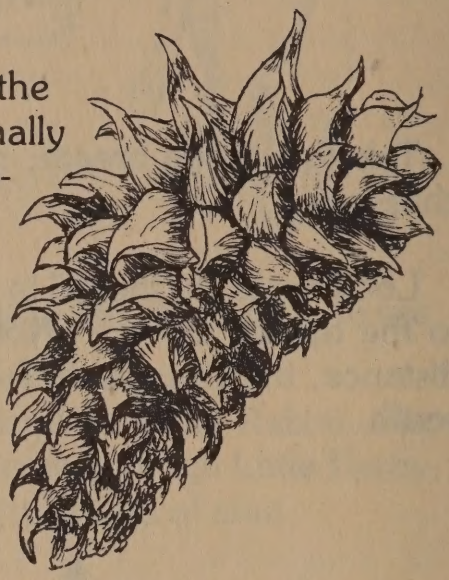
Look across to the hill in the distance. Do you see any similarity to the hill we are on? Notice the north and south slopes from a distance, the Douglas-fir forest on the north, the chaparral on the south.



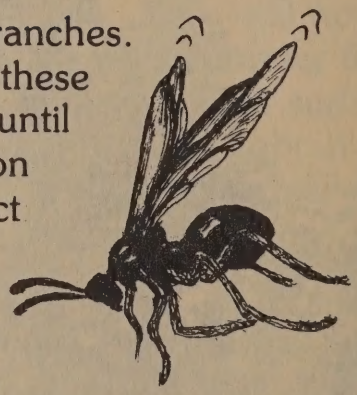
KNOBCONE PINES

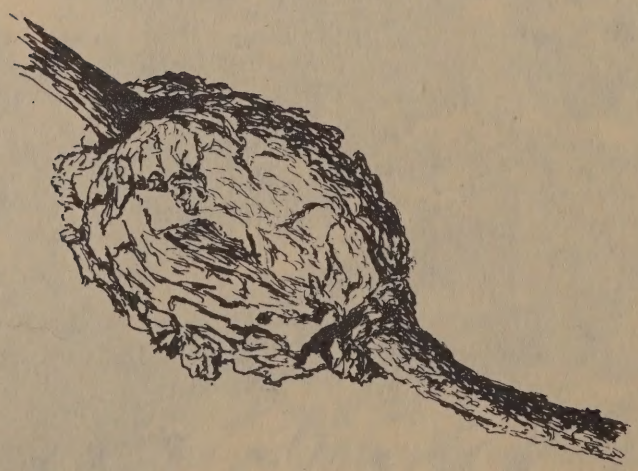
The pine trees in the chaparral community are called KNOBCONE PINES. The leaves of this pine are long, yellow-green needles about five inches long. Do you notice any difference between the fir cone and the knobcone pine cone?

These pine cones remain closed on the branches for long periods of time normally opening when heated by fire. The grey-brown bark forms scaly ridges.



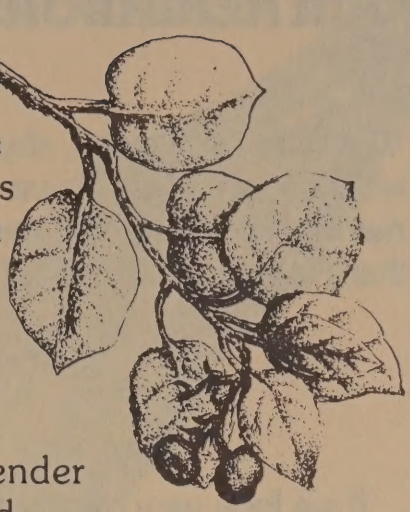
Notice the ball-like growths on some branches. Wasps lay their eggs in the "skin" of these branches. No harm is done to the branch until the minute the eggs hatch, then that section of the branch swells up providing the insect with shelter and food.

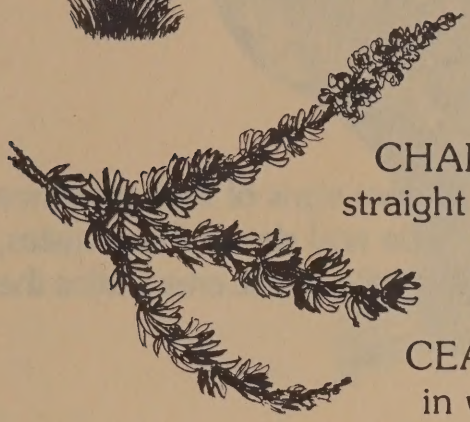




CHAPARRAL BRUSH

The lower brush is made up of several types of bushes such as MANZANITA, with red crooked branches;

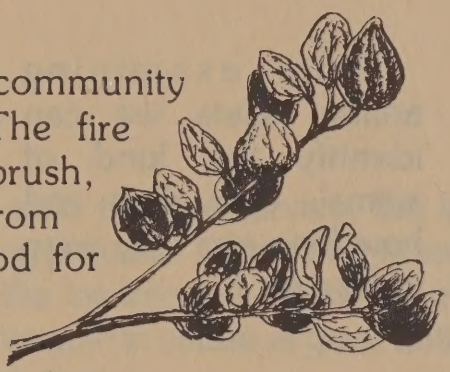




CHAMISE with slender straight branches and ...

CEANOTHUS, which when rubbed in water gives a foamy lather, a poor substitute for soap.

These plants do better in a community where periodic fires are common. The fire may burn the upper portion of the brush, but soon after, sprouts begin to grow from the roots. Tender sprouts provide food for the animals who feed here.



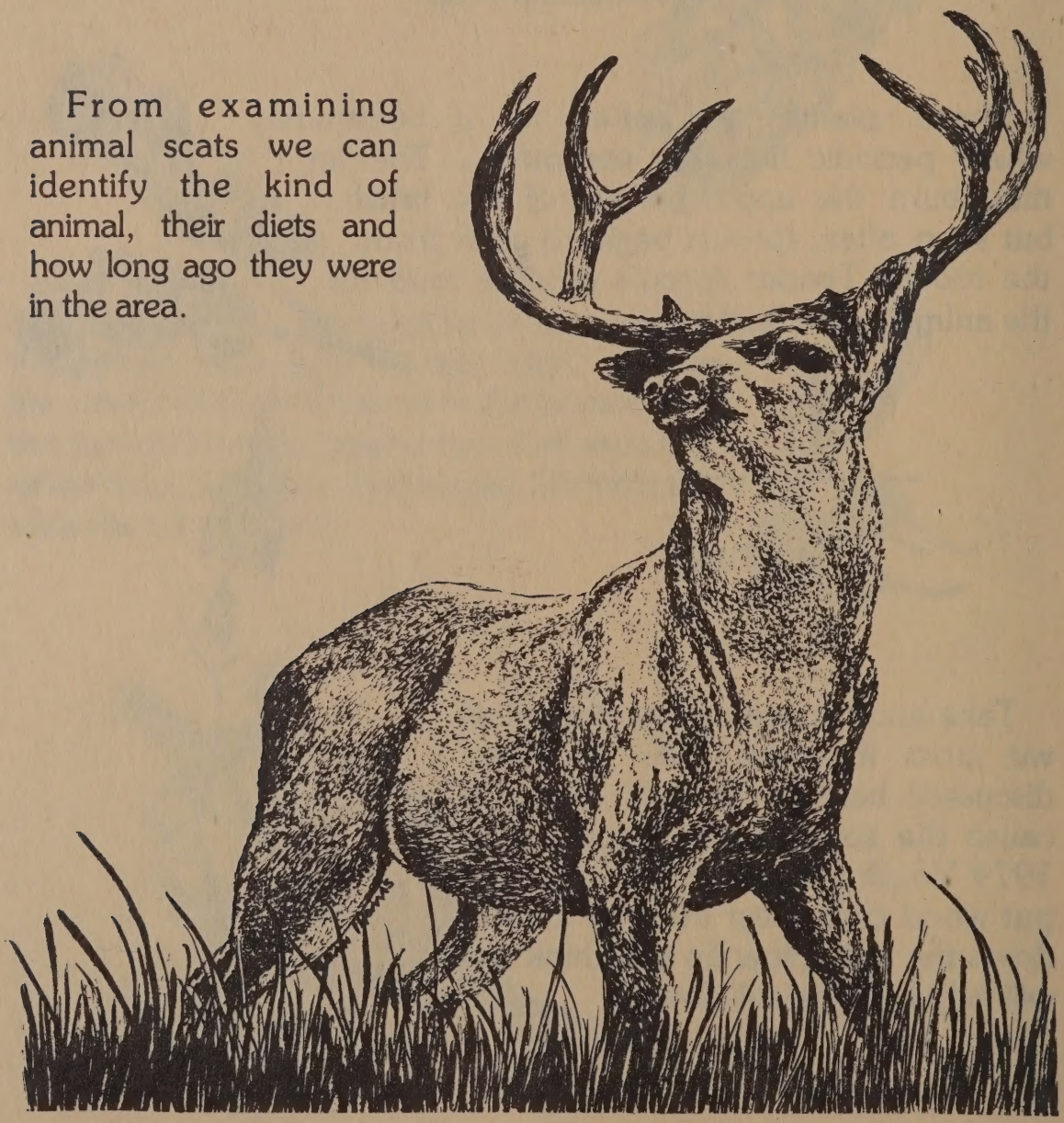
Take another look at the firetrail as we cross it again. As we have discussed before, the lack of plants cause the soil to wash away. The 1979 Youth Conservation Corps has put wood chips over the trail to hold down the soil. How do you think this will help hold the soil down?

OUR NEIGHBORS

Wildlife, in general, shy away from humans and loud noises. If you wonder why you have not seen many of the animals we have mentioned, remember that most forest animals are nocturnal, meaning that they come out to feed only at night.

If we look very closely we may be able to spot signs of their presence such as the foot prints they leave, or the shape and size of their wastes, called scats. When you return to your car from the picnic area notice the many signs animals have left behind.

From examining animal scats we can identify the kind of animal, their diets and how long ago they were in the area.



Every plant and animal depends upon each other to survive, this is called a food web. For example: a dead log provides lichen and moss with a place to live. Lichens break down the log into soil. A clump of green grass begins to grow. A tiny insect chomps on blades of grass until a toad chomps on him. Raccoons find toads tasty.

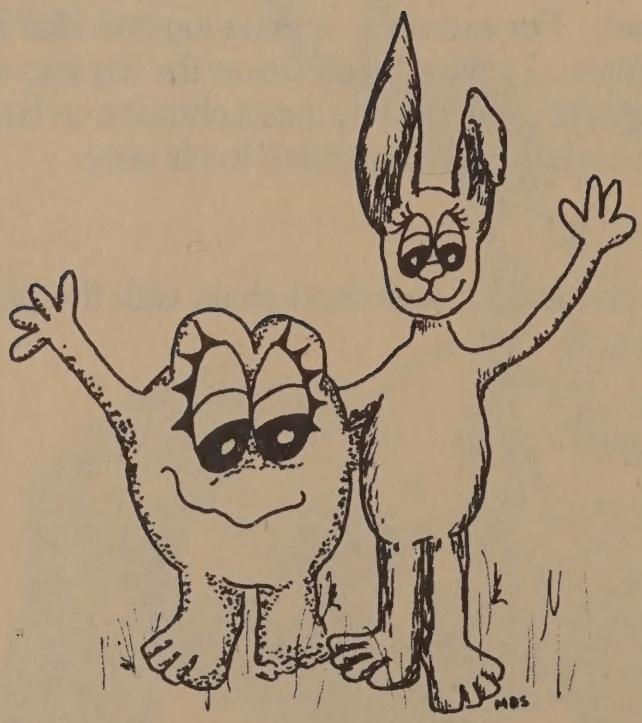
Try and compose your own food chain with the plants and animals who might live here.

FOOD CHAIN:

TRAIL'S END

We hope you have enjoyed your walk though the Little Darby area. The understanding and respect of all living things is so important in keeping the balance of Nature's plan.

If you have questions about what you have seen or learned on this trail or need information on the Bureau of Land Management or other public lands, contact the District Office in Ukiah, 555 Leslie Street.



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DEPARTMENT OF THE INTERIOR

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

BUREAU OF LAND MANAGEMENT

Caretaker of 450 million acres of public lands, the Bureau of Land Management looks after America's "last frontier."

An area twice the size of France, covering twenty percent of our Nation's total land base, the land administered by BLM contains some of America's most spectacular desert, mountain and canyon scenery. Every year millions of people hunt, fish and camp on the lands.

But recreation is only one reason our public lands are so valuable. They're also a storehouse of natural resources, of minerals, forests, waters and wildlife vital to the future of the country.

In addition, the public lands are a substantial source of income—from oil and gas leases, grazing rights, and the sale of timber, minerals, and other raw materials.

Written by Mary Beth Shipman

Illustrations by Jean Thomas

Maps and cartoons by Mary Beth Shipman

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